ABSTRACT OF THE THESIS OF

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Title: ASSESSMENT OF CHANGES IN BEHAVIORAL UNDERSTANDING, MARITAL ROLE EXPECTATIONS, SELF-CONCEPT AND IDEAL MARRIAGE PARTNER IN HIGH SCHOOL CHILD DEVELOPMENT STUDENTS

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The major purpose of this study was to assess changes in behavioral understanding and attitudes students may have experienced in association with their participation in a high school child development course. In addition, assessments were made of changes in subject's perceptions of: 1) marriage role expectation, 2) self-concept, and 3) their ideal marriage partner.

The subjects, a total of 57 sophomore, junior and senior high school students enrolled in a child development course, were divided into three groups on the basis of the number of terms enrolled. This resulted in the following treatment groups: Group I (N=28) completed one term, Group II (N=16) completed two terms and Group III (N=13) completed three terms. The course was planned to be a full year class, however, it was designed for each term to be a
relatively self-contained unit. Therefore, a student could enter the class at the beginning of any term and leave after completing one term of study and still receive a reasonably comprehensive course of study. All students elected the course and further, elected to complete one, two or three terms.

Non-parametric analyses were used to test five null hypothesis generated for this study. Four hypotheses were related to changes in behavioral understanding, marriage role expectation, self-concept and ideal marriage partner. Data were collected in a pretest posttest situation using the Film Test for Understanding Behavior (FUB), the Dunn Marital Role Expectation Inventory (DMREI) and the Interpersonal Checklist (ICL). Each hypothesis was tested independently for each of the three groups using the Wilcoxon matched-pairs signed-ranks test.

The Kruskall-Wallis one-way analysis of variance was used to test a fifth hypothesis by comparing the amount of change recorded in each dependent variable with respect to the number of terms enrolled in the course.

The findings in this study reveal that eleven of the twelve difference scores for the three groups on the FUB showed an increase and six of these eleven were significant. Group II showed the greatest amount of change, followed by Group I in both quantity and significance of change and finally by Group III. Overall, the results clearly indicate
that students did experience an increase in the understanding of the behavior of young children as a result of their association with the child development class.

Pretest scores for each of the groups indicated a clear preference for an egalitarian relationship in marriage. Over time, each group increased in its preference for this role relationship; for Group I and Group II that shift was significant.

In this study, self-concept, as measured by the ICL remained relatively stable with only one of the six change scores for the three groups, reaching significance.

Subject's perceptions of an ideal mate indicated a desire to find mates who were less dominant and loving than pretest scores revealed although there were no significant change scores associated with this trend.

Comparisons of the amount of change evidenced by the three groups for Hypothesis V showed that there was a significant difference in one area; that associated with the Film Test Score. Two other scores approached significance level; that for the Knowledge subscale and the Dunn Egalitarian subscale.

Possible explanations for the observed changes were discussed with particular emphasis on the significant findings regarding behavioral understanding.

Limitations of the study and suggestions for further research are discussed.
Assessment of Changes in Behavioral Understanding, Marital Role Expectations, Self Concept and Ideal Mate in High School Students

by

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ASSESSMENT OF CHANGES IN BEHAVIORAL UNDERSTANDING, MARITAL ROLE EXPECTATIONS AND SELF CONCEPT IN HIGH SCHOOL CHILD DEVELOPMENT STUDENTS

INTRODUCTION

Background of Study

Colleges and Universities have recognized the value of providing students experience with young children and have established nursery schools as laboratories for child care and guidance as early as the 1920's. These child development laboratories are used to support the teaching of child development courses in home economics, psychology and education. In contrast to this, at the high school level laboratories for studying young children have been used to a much lesser extent.

However, since 1963 with the enactment of the Vocational Education Act there has been an increasing number of high schools establishing child observation centers. The federal monies associated with this act have been primarily available for vocational training, however, skillful administration has often facilitated the use of these observation centers as a supplement to a number of other courses.

A prime indication of the concern for the students at the high school level is the Education for Parenthood program launched by the Office of Education and the Office of Child Development in September of 1972. The program aims
to help young men and women prepare for effective parenthood by studying human development processes and the roles of parents. In addition, it can help meet some of the adolescent's current developmental needs, for example, to understand and be of help to others and also to learn more about themselves. For some young people the need for parenthood education is immediate, since a significant number of our teenagers are undertaking early child bearing and childrearing. For example, in 1968, approximately one of every ten 17 year old girls in the United States was a mother (Kruger, 1973). Similar statistics were reported in 1975 (OGG, 1975). In Oregon in 1974, 55.5% of the births were to young mothers 24 years and under with approximately one-third of these births to mothers 15 to 19 years old (Dept. of HEW). The number of school age parents is increasing most rapidly among students 14 to 16 years of age (Nye, 1976). Between 1960 and 1973 the number of births to mothers under 16 increased 80% (March of Dimes). For other teenagers, parenthood may not become a reality for many years, however, the last basic education available to many of them will probably be that offered in their high school. Indeed, even those who do continue their education will probably study in increasingly narrow professional or technical fields. The Education for Parenthood program called, "Exploring Childhood" (Rosoff, 1973) combines
classroom instruction and practical experience working with young children under teacher supervision in an on-site laboratory nursery school, or in a community day care center, nursery school or kindergarten.

Interest in having young people gain some knowledge of the responsibilities of parenthood seems to be gaining momentum. Recently in the State of Oregon, there was an attempt by the state legislature to include in the graduation requirements for high school students a competency concerning knowledge of the parenting process. Although that requirement was not in the final draft of the bill, several districts within the state have included it in their graduation requirements.

When a vocational training program is established, the skills needed in that particular vocation are defined in relation to the designated tasks performed. The instruction is then directed to these skills. Training people to work with young children, however, is a much more complex task. The importance of the preprimary years and the child's adult contacts during these years has been readily recognized. Therefore, the dimension of sensitivity to people, especially to young children must be incorporated into the training program. This sensitivity also needs to be a part of the education for future parenthood programs. This is not to say that skills are unimportant in child
care and guidance but rather, in addition to skills, students also need to develop sensitivity to behavioral situations. This dimension of behavior understanding is more difficult to teach and to assess than are the skills usually associated with child care.

In order to determine the impact of these programs and whether or not they are meeting the needs of students in the parenting role, assessment is imperative.

Katherine Read Baker (1971) has referred to the nursery school as a human relations laboratory in which observation of and experiences with young children are likely to influence an individual's attitudes toward himself as well as toward children. High school students are likely to reflect on their feelings and interactions with people in general as well as their expectations of others and the role the family plays in a child's life. Objective information concerning the growth and development patterns of young children together with the reflection on their own feelings may lead to changes in marital role expectations.

A study reported by Harrison (1970) dealt specifically with high school youth in the State of Oregon. The dimensions of this study included the student's attitudes about himself and marital role expectation as well as behavioral understanding of children. In view of the continued need for assessment in these areas Harrison's study is important
in that it provides a model for the assessment as well as a basis for comparison of other Oregon groups studied.

Purpose of the Study

The major purpose of this study was to assess changes in behavioral understanding and attitudes students may have experienced in association with their participation in a high school child development course. The course involved the formal study of normal growth and development patterns of young children as well as observation of and participation with preschool age children. Pretest and posttest measurements with the Film Test for Understanding Behavior (FUB) were used to assess the amount of change in behavioral understanding.

In addition, the study also investigated changes in the subject's perceptions of, 1) marriage role expectations, 2) self-concept, and 3) their ideal marriage partner. Marital role expectation was measured by the Dunn Marital Role Expectation Inventory (DMREI), while self-concept and ideal marriage partner perceptions were measured with Leary's Interpersonal Checklist (ICL).

Three groups of subjects were identified on the basis of duration of involvement in the child development course (e.g., one, two or three terms). The differences between pretest and posttest scores for each of the three groups were analyzed with respect to the following hypothesis:
Hypothesis I: There is no significant change in the level of behavioral understanding.

Hypothesis II: There is no significant change in either egalitarian or traditional marital role expectations.

Hypothesis III: There is no significant change in subject reported perceptions of self-concept.

Hypothesis IV: There is no significant change in subject reported descriptions of characteristics of ideal mate.

These hypotheses were tested with the Wilcoxon matched-pairs signed-ranks test as a nonparametric test. The Wilcoxon is appropriate for small sample comparisons and is powerful in that it utilizes information regarding both the direction and the magnitude of change which occurs.

Finally, the question of the relative impact of the different duration of experience was addressed by comparing the amount of change on each of the variables previously tested, across all three groups. The Kruskal-Wallis one way analysis of variance was used to test the following hypothesis for each of the dependent variables:

Hypothesis V: There is no difference among the change scores of student groups with one, two or three terms of child development study.
REVIEW OF LITERATURE

An attempt has been made to organize the review of literature under a number of subheadings. The first subsection, the educational setting, is an attempt to provide, in greater depth than the introduction, a view of the elements in the general education environment which influence the planning of parent education courses. For the purposes of logical development, behavioral understanding is discussed followed by attitude changes as related to behavioral understanding, self-concept and marital role expectation.

Current Educational Trends

Much attention has been focused recently on the responsibility of the public schools in providing students with the basic competencies they will need in their adult lives as advanced learners, citizens, workers and consumers. Yet, all too often the importance of their future roles as parents has been either neglected or given extremely low priority in school curriculum development. Those who question whether parenthood education should be the responsibility of the school system often assume that the family fulfills this role. However, a number of factors converging today are suggesting that fewer families are able to provide teenage members with the kind of parenthood
education that comes from observing their parent's family roles and caring for younger brothers and sisters under their supervision. For example, in the 1970 report of the White House Conference on Children and Youth it was reported that approximately one out of every five young people between the ages of 14 and 17 did not live in a two parent family home. In addition the average family of today has only two children, compared to an average of five 100 years ago (Kruger, 1973) and with the increasing fragmentation of family life and activities it appears that fewer and fewer young people reach adulthood having had sufficient opportunities to learn parent roles at home.

Some educators, such as Force (1964) take a very strong position in stating that the responsibility of the school in education for family life is no longer a matter of debate. She believes that it is now recognized that in a total balanced education the task of the school is to supplement and complement those activities of the home and social structure in which children and youth are developing their attitudes, character and capacities for relating to other people. Schools must help prepare the young people of this nation as responsible adults in the many personal, social and professional aspects of life, including parenthood. Since schools traditionally have been given the responsibility for formal education in our society the
development of school based programs is logical.

In 1973, S. P. Marland of the Department of Health, Education and Welfare pledged to facilitate and enlarge the movement toward education for parenthood as one of the priorities in the universe of education. He stated that parenthood education was justified not only because young people desperately need this help in order to fulfill their role as parents and maintain the family as the vital basic unit in the American social structure but also because learning about children's needs and development is an obvious and essential component of the current national drive to build a coherent, effective system of career education. It is also possible that young men and women may develop an interest in and a commitment to the field of child development that will lead them to consider a professional career in this area. In addition, parenting is a universal and demanding "career" in itself.

Some school systems are already offering programs that include a study of child development and a supervised work experience with young children. This is true for many of those programs supported under vocational education (home economics and child service career education) and those federally funded for school age parents. However, these reach only a small fraction of the school population and involve but a few young men. For example, during the
1969-70 school year one-ninth of the nation's secondary school students were enrolled in home economics vocational education courses of all types but less than two percent of the total secondary school male population were so involved. In the entire country in 1970-71 only 5,503 young men were enrolled in child development courses (Kruger, 1973).

The growing concern of educators to provide productive work-study situations for students, coupled with the nation's expanding interest in the preschool child has provided a very favorable reception for child development programs. The appreciation which young people could gain regarding the needs of children and families in modern society should also create a stronger spirit of child advocacy among them.

**Behavioral Understanding**

It is presupposed that one of the criteria for effective work with young children is the ability to understand behavior. For the purposes of this study, understanding children's behavior is defined as having three dimensions: 1) knowledge of facts on the principles of growth, development and the behavior of young children, 2) knowledge of guidance principles, and 3) sensitivity to the needs of children (Harrison, 1970).
Increased knowledge about and understanding of children is an expected result of any instruction in child development. Watson (1958) has suggested that empathy or understanding another's feelings would increase as knowledge about that person and what he is like increases. Empathy or sensitivity may be considered then to be one of the underlying processes on which an individual builds the ability to understand others.

Dymond (1949) defined empathy as "the imaginative transposing of oneself into the thinking, feeling and acting of another and so structuring the world as he does." An empathetic individual is one who will respond to a child's expression of needs by recognizing and accepting the child's feeling in the situation, by taking action to meet these needs, showing warmth and sympathy toward the child and by viewing the child's reaction in terms of causes.

In a somewhat broader context, Dixon and Morse (1971) define two basic theoretical definitions of empathy. In the first definition, empathy is defined as an intellectual experience which is perceived as the capacity to "put oneself in the other fellow's shoes," as shown by the ability to predict the way the other person will respond in given situations. In contrast, the second definition of empathy implies an emotional condition; a feeling state which may range from close and warm to distant and formal.
Measurement of empathy in the former context, the most intellectual area, is relatively less difficult. A subject can respond to a given situation as he thinks someone else would, his response then being checked against the actual response. The less the difference the greater the empathy. However, the capacity to intellectually perceive how another person will respond is not an index of the feeling tone which high empathy should produce. In general, the measurement problem in the emotional context is a difficult one.

One of the more feasible approaches to measurement of the ability to understand behavior appears to be in measuring attitudes. An attitude may be defined as a readiness to respond to situations, persons, or objects in a consistent learned manner (Freemen, 1962). Attitudes may vary from being extremely positive through a gradation to being extremely negative, but generally have a well defined object of reference.

A number of authors have found that attitudes of students toward the guidance of young children can be modified by classroom teaching (Ingle and Robinson, 1965; Leton, 1961; Marshall et al., 1960; Walters, 1959; Walters and Fisher, 1958).

Walters (1959) reported that a group of undergraduate college women taking an introductory course in child development and guidance made significantly greater gains than
the gain of a control group as reflected by responses to the Child Guidance Survey (Wiley, 1950). However, he found little difference in attitude changes as measured by the USC Parent Attitude Survey (Shoben, 1949). These findings seem to suggest that attitudes toward child guidance may be a dimension which is not highly correlated with other aspects of parental attitudes, at least under the conditions of this study.

An earlier study by Walters and Fisher (1958) indicated that attitudes toward child guidance continued to change over a two year period. The study suggests: 1) that attitudes toward children continue to change when instruction in child development and guidance is provided, 2) attitudes toward children are not merely a function of maturation, and 3) that previous experience with test instruments does not affect the results significantly.

In a study of an undergraduate course in child psychology Costin (1960) found that students expressed more permissive accepting attitudes toward parent-child relationships after one semester. Furthermore the study indicated that it was the nature of the course itself which was influential in changing attitudes since no attitude change occurred for an introductory course taught by the same instructor. This investigation also showed that high achievers were already more permissive at the beginning of
the course than low achievers, but that both groups changed equally as much in the direction of permissiveness. Thus, in spite of the fact that some students had attained significantly less information about child psychology than others, they still changed as much, on the average as did those who gained a greater acquisition of knowledge. These findings lend support to the argument for measuring directly and specifically those attitudes which an instructor hopes to influence. To infer such changes simply on the basis of academic achievement may give false information as to which students modified their attitudes and which did not. This seems to be related to a review of studies by Taft (1955) where he reported a low correlation between intelligence and accuracy of analytic judgments. He suggests that accurate nonanalytic judgments of others may be more a function of good perceptual and judgmental attitudes than of the use of abstract intelligence. Taft distinguished between: 1) analytic judgments in which the judge is required to conceptualize, and quantify specific characteristics of a subject; and 2) nonanalytic judgments in which the judge responds in a global fashion as in matching persons with personality descriptions and in making predictions of behavior. He also suggests that an empathetic process is usually involved in nonanalytic judgments.

Attitudes toward behavioral situations have been
studied in several ways. Checklists such as the Parent Attitude Research Instrument (Shaefer and Bell, 1958), the Child Guidance Survey (Wiley, 1950), and the University of Southern California Parent Attitude Survey (Shoben, 1949) have been used to measure an adult's understanding of children and their behavior. These and other attitude tests appear to be based on several assumptions: 1) that the statements deal with controversial questions; 2) an individual's feelings or attitudes will determine his responses to the various statements; and 3) the statements can be scaled regarding the degree to which they favor or oppose the question under consideration (Freemen, 1962).

Another method of measuring attitudes has been through the use of situational tests such as the Dawe-Jones Empathy Test (Jones, 1954). The test consists of 20 line drawings containing a cross section of situations occurring between adults and children and represents a variety of children's needs and a variety of goals toward which adults and children are working. The subject is asked to imagine what he would say to the child and give the answer as quickly as he can. In a study conducted by Cantrell (1966) using the Dawe-Jones Empathy Test it was concluded that empathy as measured by this test seems to be acquired and would improve as knowledge of children and what they are like increases.
Several other attempts to use situational tests (Cline, 1955; Schalock and Edling, 1958; Schvaneveldt, 1964) have used filmed episodes of behavior thus enabling all subjects to respond to the same situations which are as similar to real life as possible. The Film Test for Understanding Behavior (Schalock and Edling, 1958) is an example of such a test that was developed for the purpose of measuring the understanding of behavior of preschool children. The test, hereafter called the FUB, is built around ten filmed episodes of three and four year old children in a nursery school. After each episode, subjects respond to statements about the observed children, the guidance needed in the situation and the level of development of the children. Such a test is thus presumably able to measure attitudes toward specific behavioral situations common to all subjects.

Responses to situational tests, including the FUB, theoretically involve attitudes toward behavior; and if in fact, attitudes are the measurable dimension of behavioral understanding then questions arise concerning the stability of attitudes. Can attitudes be changed?

In order to assess whether or not attitudes do change over time as the result of experiences, pretests and post-tests are the most frequent means to analysis; that is, a test is given before exposure to a course or an experience
and is repeated, or an alternate form of the test is given at the completion of the course, or after the designated experience.

Kelly (1965) suggests that attitudes are generally less stable than any other personality variable and will continue to change through adulthood. A likely factor influencing changes in attitudes is an increase in knowledge, since subjective knowledge of a situation does appear to influence judgments concerning the situation (Asch, Block, Hertzman, 1938). It has been suggested that knowledge is likely to produce more stable attitudes and ones more resistant to change. Therefore knowledge of a situation or subject is likely to affect attitudes toward the situation.

Attitude Changes

Understanding Children's Behavior

It could be argued that the knowledge of facts and principles does not necessarily lead to effective applications of the information. To improve the probability of modifying behavior or developing new and improved modes of behavior as well as a better understanding of children's behavior, the school must provide richer opportunities to practice these behaviors. One possibility of providing
these opportunities is to develop a setting for practice or laboratory experiences with preschool children in the schools.

The preschool laboratory can be used effectively for making observations of "textbook" learning and for deriving further knowledge. At another level it can also be utilized for introducing students gradually to the increasing responsibilities associated with the care of individual children or groups of children.

Educators in this academic area have written of the value of observation as an effective way to help students more clearly understand the behavior of children. For example Pease and Pattison (1955) state:

> A study of growth and development, because of its dynamic qualities, requires objective observation and evaluation of behavior while it is going on. In this way students begin to increase their knowledge and understanding of children as growing and developing individuals (1955, p. 755).

In addition, Katherine Read Baker (1971) has demonstrated that observations offer many possibilities for learning and for helping students accept the variations in growth among children.

In a related setting, observation of behavior has been used in areas of professional study attempting to help students increase their level of behavioral understanding. In a study involving pediatricians, the investigator concluded that observation and discussion of the mother-child-doctor
interaction of another doctor helped the pediatricians to be more perceptive to patients' reactions in their families and to their physicians (Korsch, 1956). A number of other studies (Karuven, 1960; Ingle and Robinson, 1965; Korsch 1956; and Walters, 1959) support the thinking that opportunities to make systematic observations and to practice interpreting the observed behavior helps students to develop greater behavioral understanding.

Implicitly involved in making observations of children are the subjective values of the observer. In this context, Gage and Oronback (1955) suggest that an individual's social perception, including his understanding of behavior, is dominated by what the person or "judge" brings to the situation rather than by what he actually observes.

A number of studies have attempted to relate personality characteristics to behavioral understanding (Cline, 1955; Dymond, 1950; Marshall, 1958; O'Neill, 1961; O'Neill, 1963; Smith, 1960) and in general, data from these studies indicate that behavioral understanding is difficult to predict from personality variables.

Smith (1960) investigated the relationship between academic performance and personality characteristics of 65 home economics seniors and their understanding of children's behavior. A significant positive relationship existed between scores on the FUB and the Achievement Potential and
Intellectual Efficiency scales of the California Personality Inventory. The Socialization, Maturity, and Responsibility scales of the California Personality Inventory indicated significant negative relationships with the FUB as did the Control and Discipline scales of the Parent Attitude Research Instrument; i.e., high scores on the FUB were related significantly to low scores on the California Personality Inventory and the Parent Attitude Research Instrument. Smith found no relationship between the FUB scores and the Taylor Manifest Anxiety Scales, Intelligence Quotients, grade point averages, grades in a child development course, or ratings of effectiveness with children in a nursery school laboratory.

O'Neill (1961) used the Minnesota Multiphasic Personality Inventory to measure personality variables and the FUB to measure behavioral understanding. His results indicated a significant relationship, at the .01 level of confidence, between personality scores on the MMPI and the behavioral understanding scores on the FUB for students with high levels of content background and experience. However, in 1963, with an expanded sample, a similar study by O'Neill failed to replicate these earlier findings at any of three different levels of training.

Although many educators agree with Gage and Cronbach (1955) that an individual's social perception is to some
degree dependent upon his personality characteristics, attempts to predict behavioral understanding from personality variables have met with difficulty.

It is also generally accepted that one's self-understanding is related to the ability to understand others. Medinnus and Johnson (1969) refer to the evidence from Wylie's (1961) review of the literature on the self-concept which strongly indicated that self-acceptance was related to adjustment. In general, individuals who are self-accepting seem to be accepting of others (Wylie, 1957).

The work of child development has two major purposes for high school students; to help them understand themselves, and to help them understand children.

Donald J. Cohen (1973) has stated that parenthood education can be an experience in personal growth and in consciousness-raising and a vital part of a young person's education. Adolescents are interested in thinking and talking about themselves—their feelings, ideas and plans. These concerns have many roots; changes in the young person's body; new intellectual capacities; urges to become liberated from or outgrow old fears, involvements and childish ways of doing things; and recognition of new possibilities for independent action. For the great majority of youth, there are no institutions which allow for expression of these deeply felt questions and concerns, either in
words or in action. In fact, the only type of "school" that may see its primary purposes related to feelings, drives and human growth is not the high school but the developmentally based preschool—the exemplary nursery school, day care program, or early childhood intervention program—or the open-class kindergarten. Here, feelings are central. Workers in these programs usually feel comfortable talking about children's loves and hates, and about what happens between children and parents. However, they also need to think about children's growth and development and be aware of the personal challenges, pleasures, and frustrations that arise from their close involvement with young children. Young men and women who are really involved in thinking about the younger boys and girls they will work within these settings can learn much that is deeply relevant to their own lives. They can observe that the existence of pain and confusion during certain developmental phases is natural, that behavior can be understood, that it is not easy to be a parent, that the child is not entirely the product of what his parents do with or for him, and that there are caring people who have professional competence in understanding people's lives. The concepts from psychology, sociology, group dynamics, and child development that they may naturally acquire through work and study in quality pre-school programs may well provide
them with a way of understanding their own impulses and feelings.

To set up a meaningful child development laboratory, the experiences in the laboratory must have clearly understood purposes—purposes that are known by the students and the teacher. In practice, the goals for the course may be analyzed to ascertain what contributions can be made by laboratory experiences, and then specific plans should be made for the experiences which will most likely provide the desired outcomes.

Self-Concept

Harrison (1970) has provided a review of the application of self-concept theory and research at the adolescent level. Her narrative is both succinct and germane; the review which follows draws heavily from that work.

The self-concept has a number of definitions, but in essence refers to an individual's feelings and attitudes about himself. Thus an individual's self-concept encompasses that which he believes himself to be, that which he aspires to be, that which he hopes he is now, that which he fears he is now, and his perception of how others see him (Brownfain, 1952). According to Brownfain, whenever an individual is evaluating himself he inevitably makes reference to a system of central meaning that he has about
himself and his relations to the world about him which is called his self-concept. Therefore, every evaluative statement a person makes about himself may be considered an example of his self-concept. These evaluative statements made by the individual are part of his conscious; therefore, an individual's conscious self-concept contains only the perceptions of and feelings about himself which he allows into his awareness. While students of self-concept suggest that the self-concept may be considered as having both conscious and unconscious elements, the lack of instruments for measuring the unconscious elements of the self has necessitated that most studies of adolescent self-concept focus on the conscious level (Douvan and Gold, 1966).

Although there are a number of aspects of the self-concept, recent literature has suggested two bases of self-concept; the social roles and the body image (Medinnus and Johnson, 1961). The social roles of the self-concept refer to what has sometimes been called the "looking glass self," reflections of how others see one, or what is expected of an individual because of his assigned roles. The dimension of body image is closely related to physical reality and an individual's feelings about his body.

The adolescent years are usually considered ones of rapid change with respect to physical changes of the body and changes in social roles; and for the adolescent these
fundamental changes appear to generate a central developmental problem. The adolescent discovers that he is looking different and feeling different, that he responds to situations in a different manner, and that others respond differently to him. Erikson (1950) referred to this problem as the crisis of identity and suggested that the integration of these changing aspects is a major developmental task for the adolescent. Because an individual's feelings about himself are directly related to his changing body and changing role expectations, it would seem reasonable to expect changes in self-concept during the adolescent period.

However, the stability of the self-concept during adolescence has been studied by a number of authors and apparently it is difficult to document a change during adolescence. For example, Engle (1959) found that over a two year period, from eighth to tenth grade, the self-concept of 172 middle class students remained relatively stable. In her study the self-concept was measured by a rank ordering of personality traits. Findings in a study by Carlson (1965) were consistent with Engel's data in indicating that self-esteem is a relatively stable dimension of the self. In his study of a group of students over a six year period between the sixth and twelfth grades the median self-esteem scores for boys and girls were the same at the pre-adolescent and adolescent level, although the
social-personal orientation emerged as an independent dimension of the self-image. In addition, Piers and Harris (1964) compared the stability of the self-concept among third, sixth, and tenth grade students and found that over a four month period the self-concept remained relatively stable at all three age levels.

This in itself does not completely offset the possibility of change during this time. Part of the difficulty of accepting these indications of stability as definitive stems from the fact that measures of the self-concept are usually obtained by responses to descriptive statements by the individuals being tested. In evaluations of this type of measurement, it has been suggested that the social desirability of a descriptive item has an affect on the subject's responses; Edwards (1957) found .83 and .87 product-moment correlations between the probability of endorsement and the social desirability of items on the Interpersonal Checklist. His findings indicate that subjects may respond with how they think they should feel rather than how they actually feel, therefore suggesting that individuals may not be giving an accurate evaluation of their self-concept.

Since the self-reported self-concept may be affected by the social desirability of the traits, an individual may report himself differently than others see him and at
the same time be quite aware that he is reporting inaccurately. In a study of student teachers, Dixon and Morse (1961) found that student teachers who had "good" empathy scores were seen as better teachers by their pupils. Supervising teachers also saw the "good" empathy groups as significantly better teachers than the "poor" groups. According to Dixon and Morse, "the important quality of empathy, as we recognize it in teaching, is a highly interpersonal phenomenon with the subject and object bound up in a mutual response" (1961, p. 323). In rating themselves, however, the student teachers exhibited no significant difference between the mean scores of the overall self-ratings of the "good" and "poor" empathy groups. Evidently, student teachers who had low empathy scores were not aware that they were seen as "weaker" teachers by their pupils and supervisors. One possibility is that the student teachers in the low empathy group were not aware of how they were viewed by others; however, it may also be that this group was responding in terms of the social desirability of the items.

The studies by Dixon and Morse (1961) and Edwards (1957) have relevance for understanding the self-concepts of adolescents. As adolescents experience the changes of their bodies and the ensuing changes in social roles, it would seem likely that their self-concepts would also
change. However, if in fact, self-ratings are influenced by the social desirability of items, then it would also be logical that their ratings of self-concepts would reflect to some degree how they think they should feel. Since the social desirability of items remains fairly constant, the stability of self-concept scores of adolescents may be explainable on this basis. Consequently the logic of expecting change in self-concept during adolescence would not be weakened to a great extent.

**Marital Role Expectations**

During adolescence an area of increasing interest is the preparation for marriage and family living. Havighurst (1952) considers preparation for marriage and family living to be one of the developmental tasks of adolescence. Since attitudes toward marriage and family living have been strongly influenced by home experiences and formed throughout the individual's life, adolescents exhibit great variability in attitudes toward marriage; their attitudes range from being uncertain and fearful of marriage to considering marriage the most important aspect of life and looking forward to it. In this connection, however, most adolescents consider marriage as the accepted manner of living (Havighurst, 1952; Parke and Glick, 1967). Since attitudes toward marriage and family living are a part of
each individual's unique background, each individual brings his own ideas and attitudes to his marriage. Because of the variety of attitudes towards and expectations of marriage roles, it is important that adolescents recognize their own attitudes toward family living and their expectations of their marriage partners.

A series of articles dealing with changes in the family was compiled by Edward (1969) in an attempt to bring together various factors affecting family life. It has been suggested that the family structure is changing from a patriarchal-institution type to an equalitarian-companionship type in which roles of family members are not highly institutionalized (Dunn, 1960; Hill, 1964; Kogan and Jackson, 1963). In an attempt to determine whether the equalitarian viewpoint toward family roles has been institutionalized, Dyer and Urban (1958) studied 300 single university students, an equal number of men and women, and 100 male students and their wives, most of whom were not students. Single and married people were studied on the premise that if a norm is institutionalized it would be relatively constant for both married and single individuals. The questionnaire used in the study included five areas of family activities: child-rearing, decision making, finances, household tasks, and recreation; if equalitarian views were institutionalized it was anticipated that each
of these areas would indicate equalitarian actions. The questionnaire for the single students asked them to indicate their expectations of future marital roles and the questionnaire for the married students asked them to indicate both their actual marital roles and their desired roles. Three of the areas investigated: child-rearing, decision making, and recreation substantiated the hypothesis of the institutionalization of equalitarian family norms. In the areas of finances and household tasks selected aspects appeared to be equalitarian, but the responses as a whole indicated that the equalitarian viewpoint was not institutionalized in these areas. The results of this study indicate that institutionalization of equality of action between husband and wife appears to exist in certain areas of family activity but not in all areas.

However, the families of today and of the future are undergoing some role changes and changes in expectations about future roles in the family. John Scanzoni, professor of Sociology at Indiana University points out that as recently as five years ago, when discussing the topic of gender roles for men and women, the great majority of college students held traditional preferences (1976). They believed that men should lead and women follow both in and out of marriage; that women should marry and find their status and identity in their husband; and that women should
definitely have children and consider it their prime task in life to train and nurture them. The woman's job should always be secondary in importance to her husband's occupation or career, since he, after all, was supposed to be the chief breadwinner. The remaining minority of students who felt otherwise were clearly on the defensive. But by 1975, the proportions reversed themselves. Now students who would publicly justify traditional gender roles must defend themselves against the "modern" or egalitarian gender role preferences of most students.

In a five year survey conducted at a women's college in New Jersey, Dr. Ann Parelius (1975) reported significant changes in role expectations. A questionnaire was first administered to a group of undergraduates in 1969 and was repeated with a second group in 1973. The results showed that in 1969 only 49% of the sample agreed that "a wife's career is of equal importance to her husband's," 81% of the 1973 sample agreed that this is so. While only 47% of the 1969 women expected their husband to "help with the housework," 77% of the 1973 women held this expectation. Both samples however, evidenced a strong interest in marriage and motherhood. The second sample was determined to have both a career and a family and would demand that her husband assume a major share of childrearing and housekeeping responsibility.
During the adolescent years relationships with others, especially those with the opposite sex, take on added importance. Adolescent interest in learning more about relationships with others and about family living is exhibited in part by the increasing enrollments in child development and family living courses. According to Duvall (1965) the objectives of marriage education and family living courses are most often stated in terms of knowledge, attitudes, competence in interpersonal skills, and values concerning marital integrity. Discussion of attitudes toward marriage and family living are considered an integral part of marriage courses. In reviewing more than 80 studies reporting the "effectiveness" of marriage courses, Duvall found that all of them were reported as being effective by the measures used to evaluate them; students' attitudes toward love, sex, marriage, and family living, as well as toward themselves and others became more realistic, more flexible, and more responsible as the result of their experiences in a marriage course.

One new supplement to teaching methods in these courses dealing with the family has been the utilization of study and observation of young children. Also, in teaching child development many courses focus on the child in the family setting and the interrelationships of the family members. Discussion of children's relationships with their parents
and with other children assist students in developing an awareness of the dynamics of interpersonal relations so much a part of family living. Since observation of young children and experiences with children are likely to influence individual's attitudes towards themselves as well as toward children, the nursery school has been referred to as a human relationships laboratory (Read, 1966).

As students observe and interact with young children, they are likely to reflect on their feelings and interactions with people in general, their expectations of others, and the role the family plays in a child's life. It may be that these reflections together with objective information concerning the growth and development patterns of young children lead to changes in marital role expectations.
METHOD

Subjects

The subjects for this study were 57 sophomore, junior and senior students who elected to take a course in child development at a senior high school with an enrollment of approximately 1200 students located in an Oregon city with a population of about 90,000. All subjects were enrolled during the 1974-75 school year.

A total of 89 students began participation in the study, however 5 students withdrew from the class before finishing one term and an additional 27 were eliminated from the study because they failed to complete the testing necessary to provide sufficient data. Four of the 57 subjects completed pretests and posttests on only two of the three instruments used and were therefore included in the analysis of only those variables. Subjects were divided into three groups:

Group I: Subjects completing one term of the class.
Group II: Subjects completing two terms of the class.
Group III: Subjects completing three terms of the class.

Demographic data including grade level, sex, age, grade point average, family's socioeconomic level and ordinal position of the subjects are included in Appendix B.
These data were compiled from background information supplied by the subjects and from the grade point averages supplied by the school. A copy of the student questionnaire is included as Appendix A. These summaries show that the subjects for this study were predominantly females (89%), who were 15 to 16 years old (82%), and Sophomores (71%) in high school. Some absolute differences are apparent in grade point averages (not significant) and variance is also apparent in the distribution of ordinal positions among the groups.

**Procedure**

During the first week of each term three class periods were used to explain the study and administer the tests to all subjects entering the class that term. One teacher administered the tests to all subjects. Prior to pretesting, a brief explanation of the purpose of the study, as well as a description of each of the instruments to be used was given in an attempt to generate interest, encourage participation, and conform to regulations regarding research with human subjects. However, participation was completely voluntary and it was emphasized that the testing would not influence their individual course grade in any way. One student asked to be excused from participating in the study and this request was honored.
Code numbers were assigned to the participants to insure that all information provided would remain anonymous. Also the code numbers were used to match pretests and post-tests prior to the analysis of the data.

The first class period of the three devoted to gathering of data, was used for an explanation of the study, assigning code numbers and completion of the background information sheet. The second class period was devoted to the explanation and administration of the Film Test for Understanding Behavior. During the third class period the students completed the Dunn Marital Role Expectation inventory and provided a description of self-concept and ideal mate using the Interpersonal Checklist.

This pretesting schedule was repeated at the beginning of winter and spring term for those subjects entering the class at that time.

Posttests were conducted at the end of fall and winter term for those subjects not continuing in the class and all remaining subjects were given posttests during the final week of spring term. The original testing sequence was followed in administering the posttests. All answer sheets were scored and checked by hand keys.

Educational Setting

The child development classes in which these high
school students were enrolled were part of the pilot program known as Exploring Childhood, which was started in 1972. This program, tested in 200 public schools during the 1973-74 and 1974-75 school years, is designed so that learning proceeds from the direct experience of working with children, and the "knowledge" presented in class is organized to support that first hand experience. Emphasis is placed on helping the students learn to become explicit about two aspects of the way they think about children; the goals and values they hold for what a human being should be like, both as a child and as an adult, and their own theories about how much a child can be shaped by other people. There are three general content areas; child development, socialization, and crossage helping, which is designed to give the student some initial competence in working with children. The program assumes that direct experience with young children is a necessary part of a course in child development.

The students in the Exploring Childhood classes gain their experience with children in an on-campus preschool and observation center which was established with a combination of monies from a consumer in Homemaking grant, Vocational Education funds and school district funding. Sixteen three and four year old children from the community participate in the preschool center four days a week, from
8 a.m. to 2 p.m. Included in the group are children from different ethnic and socioeconomic backgrounds and children of varying ordinal positions within families of various sizes.

The high school students meet for 40 minutes, four days a week for in-class discussion. In addition, students are scheduled from their resource time to participate in the preschool for two 40 minute periods a week and to observe in the observation room one 40 minute period a week. The students are scheduled so that there will be 4 or 5 working in the center at a time with the teacher and the student assistant.

The teachers work as a team to carry out the planning and instruction in the child development program. One of the teachers supervises in the preschool and instructs one section of the Exploring Childhood class. The second teacher instructs another section of Exploring Childhood and the second year vocational child development class.

In the preschool center the major teaching method is the supervisor's demonstration of principles and techniques to use when working with young children. Students progress toward taking responsibility for the supervision of all activities, including reading stories, serving snacks and lunch, and being available to help children when needed. As a part of their indoctrination, students entering the
child development class have several orientation periods in the preschool to acquaint them with the setting, policies and procedures. In the subsequent observation periods students keep a journal of their observations which can be shared with the teacher for discussion and explanation of the activities observed. In the classroom several methods of teaching were used, including readings, small group discussion, lecture-discussion, films and reports.

**Instruments**

**Socioeconomic Index**

Descriptive data of the subjects were collected in order to determine the social position of each subject. Social position was assigned by using Hollingshead's Two Factor Index of Social Position (1957). It is based on three assumptions: 1) there is a class structure in society, 2) positions within the structure are determined mainly by two characteristics, and 3) the characteristics symbolic of status may be scaled and used statistically. The two characteristics symbolic of status used by Hollingshead are education and occupation. Each occupation and level of education is given a scale score and multiplied by the factor weight of seven for occupation and four for education. These two products are then added to yield an Index of Social Position Score. Scores range on a continuum
from a low of 11 to a high of 77. The scores are grouped into social class positions according to Hollingshead's suggestion for predicting social class position of an individual or a nuclear family.

<table>
<thead>
<tr>
<th>Social Class</th>
<th>Range of Computed Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Upper</td>
<td>11-17</td>
</tr>
<tr>
<td>II</td>
<td>18-27</td>
</tr>
<tr>
<td>III</td>
<td>28-43</td>
</tr>
<tr>
<td>IV</td>
<td>44-60</td>
</tr>
<tr>
<td>V Lower</td>
<td>61-77</td>
</tr>
</tbody>
</table>

(Hollingshead, 1957, p. 10).

The Film Test for Understanding Behavior

According to the authors, the Film Test for Understanding Behavior (FUB) is "a technique for measuring behavioral involvement that is encountered in an interpersonal situation, yet (it) maintains sufficient simplicity to make its administration feasible" (Schalock and O'Neill, 1960, p. 1). The test consists of responses to ten filmed episodes of three and four year old children in a nursery school. Each episode is observed for approximately one minute; after each episode the subjects respond to the items referring to that particular episode. The subjects' responses to the items are given by using a five point agreement-disagreement continuum: Agree, Agree with Hesitation, Uncertain, Disagree with Hesitation, and Disagree.

The behavioral episodes emphasize incidents which
frequently occur in the nursery school, which are of interest to observers, and which seem to be of particular value in a learning situation. The episodes include a child simply sitting and watching that which is occurring around him, a child playing in paint, a child taking part in rhythms, a child dressing, a child painting leaves outside, a child eating, a situation in which two children confiscate the property of another with its attendant consequences, a motor development sequence, a sequence involving aggression, and an episode enabling comparative judgments of mental ability.

After the episodes were selected, test items were developed to obtain the major kinds of behavioral understanding which were observed in each particular episode. The items were developed with reference to three dimensions of behavioral understanding: 1) knowledge of facts and principles of growth, development, and behavior of young children, 2) knowledge of guidance principles, and 3) sensitivity to the needs of children. Items included questions about the child's feelings in the situation, the kinds of guidance that could be given to the child in the situation, and questions relating to general information about the development and behavior of children of this age. In order to evaluate the clarity and readability of the items, the test items were submitted to a number of judges outside the
field of psychology and human development. After the completion of necessary revisions, an initial item pool of 130 items was established.

Scores for each item range from +2 for the most correct response to -2 for the least correct response. The response weights of each item were assigned jointly by a group of five persons holding advanced degrees in psychology, child development or the field of nursery school education. Items which were rated as being strong by four of the five judges, and which had at least 85% interjudge agreement as to the "most correct" responses were selected for each episode. A ranking of these responses was made to determine the scoring weights of each item.

Additional testing and item analysis occurred in 1960 and resulted in the more discriminating Form II of the Film Test (Schalock and O'Neill, 1960). Two scoring keys were established for Form II of the test, with each key containing 36 items. The high key (part H) is used for people having considerable academic work in child development and psychology; the low-medium key (part L) is used for people having little or no background in child development and psychology. In this study the low-medium key of Form II of the FUB was used for scoring the responses.
Suzulewski (1976) provided information on the reliability of the FUB by computing internal consistency reliability coefficients for the total test score and each of the three subscales; Knowledge, Guidance and Sensitivity. In her reliability study, data was obtained from 321 students enrolled in several sections of a beginning child development course at the university level. The students were predominantly female (95%), undergraduate (99%) and reported a major in some area of Home Economics (61%).

Total test reliability was estimated at $r = .77$ while the individual subscale coefficients were: Knowledge $r = .33$, Guidance $r = .73$ and Sensitivity $r = .27$. In her assessment she states that:

The stringency of the internal consistency analysis as well as the general homogeneity of the sample would allow a conclusion that overall, the Film Test for Understanding Behavior has demonstrated an adequate degree of reliability when testing students at this (college) level.

In addition, she reports that the magnitude of the total test score reliability coefficient is consistent with prior reliability coefficients established for the FUB using the test-retest method. Reliability studies have not been attempted at the high school level.
The Dunn Marital Role Expectation Inventory

The Dunn Marital Role Expectation Inventory (DMREI) is designed to reflect role expectations of youth in such a way that the scores can be treated statistically. The inventory has two forms (Form M for boys, Form F for girls) each having a general statement, "In my marriage I expect" follows by 71 items to which the subjects respond 1) strongly agree, 2) agree, 3) undecided, 4) disagree, or 5) strongly disagree. As determined by Dunn, 37 of the items are authoritarian and 34 are equalitarian. Dunn further divided the instrument to assess role expectations in seven areas: authority, homemaking, care of children, personal characteristics, social participation, education, and employment. Each area contains both equalitarian and authoritarian items.

The 71 items used in the test differentiated between "high" and "low" groups of adolescent subjects at the five percent level of significance. Intrinsic validity is claimed on the basis of this significance and by the fact that the items were selected by a consensus of qualified judges (Buros, 1965).

According to Dunn (1960) the reliability of the instrument was determined by a split-half correlation coefficient computed on scores of 50 respondents. The resulting
coefficient of .953 was corrected to .975 and is of sufficient magnitude to permit interpretation of a substantial degree of reliability in the instrument.

The scoring on the DMREI takes into account Dunn's philosophy that agreement with equalitarian items is a more desirable position than agreement with authoritarian items. Therefore in scoring, a positive value was given to the subjects' responses when the subject indicated she strongly agreed or agreed with the equalitarian items and when she indicated she disagreed or strongly disagreed with the authoritarian items. Consequently, the subscale Corrects refers to equalitarian items, while the Incorrects subscale refers to authoritarian items. An undecided score reflects a choice of responses somewhere between the equalitarian and authoritarian viewpoints.

The Interpersonal Checklist

The Interpersonal Checklist was used in this study to measure the self-concept. "As one of the more frequently used instruments to assess interpersonal behavior, especially the self-concept, the interpersonal Checklist (ICL) has apparent advantages over other similar instruments" (Briar and Bieri, 1963, p. 193).

The ICL is a self-rating adjective checklist developed for use as a part of Leary's Interpersonal Diagnosis of
personality. Adjective checklists generally consist of a list of words or brief phrases; subjects are thus able to describe themselves or other persons by checking the appropriate items. In this study the subjects were asked only to describe themselves as well as an ideal mate.

The ICL has 128 descriptive items representing eight interpersonal traits which are present in everyone to some extent:

1) managerial-autocratic
2) competitive-exploitive
3) aggressive-blunt
4) skeptical-distrustful
5) self-effacing-modest
6) docile-dependent
7) cooperative-overconventional
8) responsible-overgenerous

These eight interpersonal traits are identified in Figure 1.

According to Briar and Bieri (1963, p. 193), Leary and his colleagues refer to these traits as

... a set of eight personality dimensions called octants which presumably reflect important aspects of personality functioning. These octants yield scores which when combined in certain ways from rationally determined formulae are assumed to reflect two overall behavioral dispositions, dominance and love. Such an instrument as the ICL thus has the advantage over some other checklist procedures of rather careful delineation of those personality dimensions which it purports to measure.

The dominance and love dimensions of the ICL were confirmed by Foa (1961) by factor analysis. The dominance and love dimensions are converted to a standard score and then placed on a circular grid as shown in Figure 1.
Figure 1. Leary Interpersonal Checklist Diagnostic Grid.
In developing the ICL each item was categorized according to "intensity." Low intensity items referred to traits in necessary and moderate amounts. Intensity also referred to the endorsement frequency of the items. The final four rated intensity levels corresponded approximately to 90, 67, 33, and 10 percent of the examinees agreeing with the phrases as being self-descriptive. Item selection was also based on the frequencies with which intensity levels were checked, the average test scores, the tallies of words not understood, summaries of verbal complaints obtained by interviews, trait intercorrelations and item intercorrelations (Buros, 1965). The fourth revision and more discriminating form of the UCL and thus the instrument is to be used for research purposes only.

LaForge and Suczek (1955) found test-retest correlations from .73 to .78 on the ICL which indicate sufficient stability for personality research.
RESULTS

Data for this study were collected during the 1974-75 school year from 57 high school subjects who elected to take a child development course involving participation with young children. While the course is planned to a full year, it is designed for each term to be a relatively self-contained unit, including a thorough overview of developmental principles and sequences as they relate to young children. Therefore, a student may enter the class at the beginning of any term; fall, winter or spring and may leave upon completion of one term and still receive a reasonably comprehensive course of study. Students may elect to complete two or three terms. Pretests were administered when the subject entered the class and post-tests given at the end of the last term they attended.

Students were then assigned to experimental groups according to the number of terms of study completed. This assignment resulted in the formation of the following groups:

Group One : (N=28) Subjects who completed one term.
Group Two : (N=16) Subjects who completed two terms.
Group Three : (N=13) Subjects who completed three terms.

Nonparametric analysis were used to compare pretest scores of the groups, to test hypotheses concerning change
and to compare the overall amount of change among the three groups. These analyses deal only with rank order of scores; however, mean values and average raw score differences are reported with the results since rankings would provide little usable information regarding trends.

The Kruskal-Wallis test for analysis of variance was used to determine whether the pretest scores of the three groups were significantly different. The results of these tests are shown in Table 1. Only one H value is significant, that related to the analysis of Total Film Test Score. A comparison of the pretest means suggest that the much higher average starting score for Group III is a strong influence on this significant finding. One other value is approaching significance, that associated with the Dominance subscale on the Interpersonal Checklist for ideal mate. The pretest means for Group III may be a factor in this score.

The Wilcoxon matched-pairs signed-ranks analysis was used to test the hypotheses dealing with changes in behavioral understanding, marriage role expectations, self-concept and ideal mate. With one experimental group larger than N=25 it is necessary to convert the Wilcoxon T-values to Z scores for any significance check. It has been shown that this conversion is an excellent approximation even for small samples, therefore, Z score conversions were
Table 1. Summary of the comparisons of pretest mean values for groups one, two and three with the Kruskal-Wallis H value.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pretest X</th>
<th></th>
<th>Kruskal-Wallis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group One</td>
<td>Group Two</td>
<td>Group Three</td>
</tr>
<tr>
<td>Film Test:Total</td>
<td></td>
<td>-3.71</td>
<td>-1.68</td>
<td>7.31</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
<td>-0.20</td>
<td>0.46</td>
<td>1.31</td>
</tr>
<tr>
<td>Guidance</td>
<td></td>
<td>-3.12</td>
<td>-2.20</td>
<td>3.00</td>
</tr>
<tr>
<td>Sensitivity</td>
<td></td>
<td>-0.39</td>
<td>0.06</td>
<td>3.00</td>
</tr>
<tr>
<td>DMREI Egal</td>
<td></td>
<td>24.48</td>
<td>26.06</td>
<td>25.38</td>
</tr>
<tr>
<td>DMREI Trad</td>
<td></td>
<td>8.88</td>
<td>7.92</td>
<td>7.08</td>
</tr>
<tr>
<td>ICL Dom Self</td>
<td></td>
<td>52.75</td>
<td>56.06</td>
<td>52.53</td>
</tr>
<tr>
<td>ICL Lov Self</td>
<td></td>
<td>51.03</td>
<td>53.80</td>
<td>52.30</td>
</tr>
<tr>
<td>ICL Dom Ideal</td>
<td></td>
<td>65.87</td>
<td>65.13</td>
<td>61.15</td>
</tr>
<tr>
<td>ICL Lov Ideal</td>
<td></td>
<td>53.85</td>
<td>56.20</td>
<td>55.61</td>
</tr>
</tbody>
</table>

p < .05, H = 599

*Significant at the .05 level.

completed for each of the Wilcoxon test results and they are the principle statistic reported in the tests of hypotheses I, II, III and IV.

Hypothesis I: There is no significant change in the level of behavioral understanding.

The measurement of behavioral understanding used in this study generates three subscales; Knowledge, Guidance and Sensitivity, as well as a Total score which is the summation of these three dimensions.
A summary of the mean value for the pretests and posttests, and the results of the Wilcoxon test for each of the three groups is reported in Table 2.

Eleven of the twelve difference scores associated with the tests for significance of change are positive values indicating an increase in scores at the time of posttesting. Six of these eleven increases are statistically significant and as such provide grounds for rejection of the null hypothesis.

It is apparent that Group II has evidenced the greatest amount of change, in both raw score increases and in number of statistically significant increases. As such, this Group, with two terms of experience is very close to a complete statistical rejection of the null hypothesis. They are followed by Group I in both quantity and significance of change, and finally by Group III.

In general, each of the three groups evidence an increase in behavioral understanding. While that increase is most pronounced in Group II, even those students with one term of experience did have significant increases recorded for both the Total score and the sensitivity subscale. The results of these tests would support the notion that coursework and experience, of the type provided in this setting could result in significant increases in the student's understanding of young children.
Table 2. Summary of the mean values and Wilcoxon Z comparisons of pretest and posttest scores for the Film Test for Understanding Behavior.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pretest X</th>
<th>Posttest X</th>
<th>Difference</th>
<th>Wilcoxon Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group One</td>
<td>(N=28)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>-3.71</td>
<td>.92</td>
<td>+4.38</td>
<td>2.10*</td>
</tr>
<tr>
<td>Knowledge</td>
<td>-0.20</td>
<td>0.46</td>
<td>+ .66</td>
<td>0.83</td>
</tr>
<tr>
<td>Guidance</td>
<td>-3.12</td>
<td>-1.50</td>
<td>+1.62</td>
<td>1.58</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>-0.39</td>
<td>1.96</td>
<td>+2.35</td>
<td>2.73**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Two</td>
<td>(N=16)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>-1.68</td>
<td>8.26</td>
<td>+9.93</td>
<td>2.78**</td>
</tr>
<tr>
<td>Knowledge</td>
<td>0.46</td>
<td>4.20</td>
<td>+3.74</td>
<td>3.06**</td>
</tr>
<tr>
<td>Guidance</td>
<td>-2.20</td>
<td>1.53</td>
<td>+3.73</td>
<td>1.93</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0.06</td>
<td>2.53</td>
<td>+2.59</td>
<td>2.10*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Three</td>
<td>(N=13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.31</td>
<td>8.84</td>
<td>+2.53</td>
<td>0.59</td>
</tr>
<tr>
<td>Knowledge</td>
<td>1.31</td>
<td>3.15</td>
<td>+1.85</td>
<td>2.76**</td>
</tr>
<tr>
<td>Guidance</td>
<td>3.00</td>
<td>2.23</td>
<td>-0.76</td>
<td>0.00</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>3.00</td>
<td>3.46</td>
<td>+0.46</td>
<td>0.21</td>
</tr>
</tbody>
</table>

* Significant at the .05 level.

** Significant at the .01 level.
Group III is somewhat of a problem in interpretation in that one would logically expect the third term of exposure to cumulate in additional increases in scores. However, it should be noted that the pretest scores for this group are higher on all dimensions of the test; the total score is significantly higher (p > .05). It could be that the higher scores play a part in a "ceiling" effect for students at this age and maturity level. At any rate, these high pretest scores are particularly intriguing when one considers that, as pretest scores, they were recorded before any exposure to coursework or experience and that this test was taken at essentially the same time as all other subjects. In one sense, the higher scores are somewhat "predictive" of the length of time the students will elect to study child behavior. Indeed there may be other dimensions of understanding, not represented in this test, which are undergoing interesting and perhaps dramatic changes. It is also possible that the grade point average and/or the ordinal position of these subjects (Tables 10 and 14, Appendix B) are influencing factors.

Hypothesis II: There is no significant change in either egalitarian or traditional marriage role expectations.

Marriage role expectation is analyzed on the Dunn Marital Role Expectation Inventory through two subscales;
one depicting a traditional viewpoint towards marriage and the other an egalitarian viewpoint. The scoring on the Dunn Marital Role Expectation Inventory takes into account that Dunn's philosophy that egalitarian items are more desirable than authoritarian items.

Table 3 presents a summary of the Wilcoxon test, as well as the mean score on pretests and posttests and differences for the Dunn Marital Role Expectation Inventory (DMREI) for each of the three groups.

Significant changes for Group I were shown for both the Egalitarian and Traditional subscale at the .01 level of confidence. These findings allow rejection of the null hypothesis of this group. The combined increase in egalitarian scores and the decrease in traditional scores for Groups I and III, is a clear and significant indication that the subjects became more "modern" in their perception of marriage roles. This is particularly interesting in that this change is in association with their exposure to a child development class.

Group III showed a significant change in their expectation of marriage roles with a score of 2.83 associated with the egalitarian subscale, indicating a rejection of the null hypothesis for the subscale. A decline in the score for the traditional subscale was not significant.
Table 3. Summary of the mean values and Wilcoxon Z comparisons of pretest and posttest scores for the Dunn Marital Role Expectation Inventory.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pretest X</th>
<th>Posttest X</th>
<th>Difference</th>
<th>Wilcoxon Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group One</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMREI Egal</td>
<td>24.48</td>
<td>26.18</td>
<td>+1.70</td>
<td>3.53**</td>
</tr>
<tr>
<td>DMREI Trad</td>
<td>8.88</td>
<td>6.36</td>
<td>-2.52</td>
<td>2.73**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group Two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMREI Egal</td>
<td>26.06</td>
<td>25.53</td>
<td>-0.53</td>
<td>0.71</td>
</tr>
<tr>
<td>DMREI Trad</td>
<td>7.92</td>
<td>5.20</td>
<td>-2.72</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group Three</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMREI Egal</td>
<td>25.38</td>
<td>25.92</td>
<td>+0.59</td>
<td>2.83**</td>
</tr>
<tr>
<td>DMREI Trad</td>
<td>7.08</td>
<td>4.92</td>
<td>-2.16</td>
<td>1.20</td>
</tr>
</tbody>
</table>

**Significant at the .01 level.

Hypothesis III: There is no significant change in subject reported perceptions of self-concept.

Self-concept on the Interpersonal Checklist is assessed using two subscales; these are the scales on Dominance and love.

The results of the Wilcoxon test for the Dominance and Love subscales of the Interpersonal Checklist for each of
the three groups are shown in Table 4.

Table 4. Summary of the mean values and Wilcoxon Z comparisons of pretest and posttest scores for self-concept for the Interpersonal Checklist.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pretest $\bar{X}$</th>
<th>Posttest $\bar{X}$</th>
<th>Difference</th>
<th>Wilcoxon Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group One</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(N=28)$</td>
</tr>
<tr>
<td>ICL Dom</td>
<td>52.75</td>
<td>54.21</td>
<td>+1.46</td>
<td>1.55</td>
</tr>
<tr>
<td>ICL Lov</td>
<td>51.03</td>
<td>52.21</td>
<td>+1.18</td>
<td>1.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group Two</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(N=15)$</td>
</tr>
<tr>
<td>ICL Dom</td>
<td>56.06</td>
<td>58.73</td>
<td>+2.67</td>
<td>2.13*</td>
</tr>
<tr>
<td>ICL Lov</td>
<td>53.80</td>
<td>54.26</td>
<td>+0.46</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group Three</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$(N=13)$</td>
</tr>
<tr>
<td>ICL Dom</td>
<td>52.53</td>
<td>54.30</td>
<td>+1.77</td>
<td>0.91</td>
</tr>
<tr>
<td>ICL Lov</td>
<td>52.30</td>
<td>53.53</td>
<td>+1.23</td>
<td>1.09</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.

The difference in mean scores between pretests and posttests on all three groups show an apparent increase. One Wilcoxon Z score reached the .05 level of significance; the Z value of 2.13 is associated with the Dominance subscale for Group II, reflecting that the subjects perceived themselves as more dominant at the time of posttesting (after 2
terms exposure). The null hypothesis can be rejected only in respect to this score.

In general, all subjects perceived themselves to be more dominant as well as more loving after exposure to the child development class. However, the reports of self-concept remain relatively stable.

Hypothesis IV: There is no significant change in subject reported descriptions of ideal mate.

Table 5 gives the summary of results for pretest and posttest means and Wilcoxon Z values for ideal mate for each of the three groups. The differences between the means of all of these scores show a decrease except for one score; that associated with the Dominance subscale for Group III. No Wilcoxon Z value reached significance level, therefore, the null hypothesis cannot be rejected for any of these scores.

The lack of significant findings would support the conclusion that perceptions of ideal mate remained stable. It is interesting to compare the Interpersonal checklist scores in Table 4 with those in Table 5 for Groups I and II. In both instances subjects tended to perceive themselves to be more dominant and loving but desire a mate to be less so. Possibly some congruence in mate selection decision is occurring.
Table 5. Summary of the mean values and Wilcoxon Z comparisons of pretest and posttest scores for subject reported descriptions of ideal mate for the Interpersonal Checklist.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pretest X</th>
<th>Posttest X</th>
<th>Difference</th>
<th>Wilcoxon Z Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group One</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(N=28)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICL Dom</td>
<td>65.87</td>
<td>63.85</td>
<td>2.02</td>
<td>0.74</td>
</tr>
<tr>
<td>ICL Lov</td>
<td>53.85</td>
<td>51.67</td>
<td>2.18</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group Two</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(N=15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICL Dom</td>
<td>65.13</td>
<td>63.13</td>
<td>2.00</td>
<td>0.40</td>
</tr>
<tr>
<td>ICL Lov</td>
<td>56.20</td>
<td>54.66</td>
<td>1.54</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group Three</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(N=13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICL Dom</td>
<td>61.15</td>
<td>64.30</td>
<td>3.15</td>
<td>1.61</td>
</tr>
<tr>
<td>ICL Lov</td>
<td>55.61</td>
<td>53.38</td>
<td>2.23</td>
<td>0.53</td>
</tr>
</tbody>
</table>

*No Z scores are significant.

Hypothesis V: There is no difference among the change scores of student groups with one, two, or three terms of child development study.

The Kruskal-Wallis one way analysis of variance was used to determine if there was a significant difference in the amount of change experienced by the three student groups. The summary for this comparison showing Kruskal-Wallis H scores is found in Table 6. One score, that
Table 6. Summary of the Kruskal-Wallis one way analysis of variance for change scores of high school student groups with one, two or three terms of child development study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kruskal-Wallis H Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film Test: Total</td>
<td>5.99*</td>
</tr>
<tr>
<td>Subscale: Knowledge</td>
<td>5.91</td>
</tr>
<tr>
<td>Subscale: Guidance</td>
<td>3.18</td>
</tr>
<tr>
<td>Subscale: Sensitivity</td>
<td>0.65</td>
</tr>
<tr>
<td>DMREI Egalitarian</td>
<td>5.17</td>
</tr>
<tr>
<td>DMREI Traditional</td>
<td>0.87</td>
</tr>
<tr>
<td>ICL Dominance Self</td>
<td>0.30</td>
</tr>
<tr>
<td>ICL Love Self</td>
<td>0.00</td>
</tr>
<tr>
<td>ICL Dominance Ideal Mate</td>
<td>3.06</td>
</tr>
<tr>
<td>ICL Love Ideal Mate</td>
<td>0.54</td>
</tr>
</tbody>
</table>

p < .05 = 5.99

*Significant at the .05 level.

associated with the Total score for the Film Test for Understanding Behavior reached a level of significance at the .05 level of confidence. An inspection of the Wilcoxon Z scores in Table 3 suggest that this significant value is being most influenced by the highly significant changes in total score recorded for Group II (approximately 10 points average). Two other findings, while not significant, deserve attention. These are the Knowledge subscale in the Film Test for Understanding Behavior and the Egalitarian subscale on the Dunn Marital Role Expectation Inventory.
The $H$ values on both of these are approaching significance at the 5 percent level. It is likely that these $H$ values are influenced by the significant increases in knowledge for Groups II and III (Table 3) and the significant increases on the Egalitarian subscale for Groups I and III (Table 4).
SUMMARY AND DISCUSSION

Summary

The major purpose of this study was to assess changes in behavioral understanding and attitudes towards children experienced by high school students in association with their participation in a high school child development course. The study also investigated changes in student's perceptions of, 1) marriage role expectations, 2) self-concept, and 3) ideal marriage partner.

Subjects in this study were 57 sophomore, junior and senior students who elected to take a child development class as part of their high school course of study. Although it was a full year class, subjects had the option of electing the class for one, two or three terms. Depending upon the number of terms selected the students were assigned to one of three groups for analyses:

Group One: (N=28) Subjects who completed one term.
Group Two: (N=16) Subjects who completed two terms.
Group Three: (N=13) Subjects who completed three terms.

The Film Test for Understanding Behavior (FUB), the Dunn Marital Role Expectation Inventory (DMREI), and the Interpersonal Checklist (ICL) were used to collect data
relating to behavioral understanding, marital role expectations, self-concept and the ideal mate. Pretest and posttest measures were collected and these data were then used to test the following null hypotheses:

Hypothesis I: There is no significant change in the level of behavioral understanding.

Hypothesis II: There is no significant change in either egalitarian or traditional marital role expectations.

Hypothesis III: There is no significant change in subject reported perceptions of self-concept.

Hypothesis IV: There is no significant change in subject reported descriptions of characteristics of the ideal mate.

For the tests of hypotheses the three groups were treated separately to allow for analysis of differences which might occur in relation to the number of terms in the course. Change scores of the three groups were then analyzed to test the following:

Hypothesis V: There are no significant differences among the change scores of student groups with one two or three terms of child development study.
The Wilcoxon matched-pairs signed-ranks test was used to test for the significance of difference between the pretest and posttest score for the first four hypotheses. To determine if the change scores of the three groups were significantly different the Kruskal-Wallis one way analysis of variance was used.

The tests of Hypothesis I (Behavioral Understanding) for the three groups indicated that of the twelve difference scores associated with the tests for significance of change, eleven were positive values and six of these eleven increases were statistically significant; four at the .01 level of confidence. Group II showed the greatest amount of change, followed by Group I in both quantity and significance of change and finally by Group III. In general, these findings indicate that students did experience an increase in the understanding of the behavior of young children in association with their enrollment in a child development class.

Results of the tests of Hypothesis II (Marital Roles) reveal that changes occurred in subject's expectations of marriage roles, with Groups I and III showing the greatest amount of change. Change scores for subjects in these two groups indicate that they expect a more egalitarian relationship in their marriages. No significant differences occurred in group II.
Although the results of the tests for Hypothesis III (Self-Concept) indicated only one significant change; that on the Dominance subscale for Group II, all difference scores for each of the three groups indicated an increase from pretest to posttest. These increases reflect the fact that the subjects were reporting themselves as more dominant and more loving. The tendency was evident regardless of the number of terms enrolled in the course.

The tests for Hypothesis IV (Ideal Mate) revealed no significant differences, however, the change scores reflect an average decrease for five of the six comparisons. In comparing these trends with those evidenced in the self-concept measures it is interesting to note that in general, the subjects perceived themselves as higher on the dominant and love subscale after the course while at the same time, they described their "ideal mates" as lower on both of these dimensions.

Results of the comparisons of the amount of change evidenced by the three groups in relations to Hypothesis V indicate that there was a significant difference in one area; that associated with the Film Test Total score. Two other scores approached significance level; that for the knowledge subscale and the Dunn Egalitarian subscale.

Discussion

The highly significant findings regarding behavioral
understanding in this study indicate that students gained in knowledge of the growth and development of young children and developed an increased awareness of and sensitivity to the needs of children. It is particularly encouraging to note that significant increases were evidenced even in the group with one term of exposure. Subjectively and with a certain amount of logic, these increases can be related back to the educational setting.

The child development class encompassed three levels of involvement for the students, with each level providing successive opportunities to increase knowledge and understanding. Students were involved in, 1) formal study of child development within the classroom, 2) regularly scheduled observations with an opportunity to practice interpreting the observed behavior, and 3) making practical application of theory and guidance principles within the preschool laboratory as a part of the learning experience and an expression of the product of learning. In the evolution of courses dealing with human growth and development, this plan of involvement is relatively complex and sophisticated.

Traditionally courses in human growth and development have used learning of factual material as the primary method of preparing students for working with children. In the research setting this dimension, an increase in factual
knowledge regarding human growth and development, has been the primary dependent variable. For example, earlier studies by Walters and Fisher (1958) and Costin (1960) assessed changes in knowledge of college students in relation to a one term course. Both attempts documented increases in knowledge, however, both studies utilized a limited assessment of behavioral understanding and both relied primarily on the lecture method for presentation of material. In relation to earlier studies dealing with the assessment of behavioral understanding as a function of academic study, the present study offers two improvements. First, with the Film Test available for assessment, the capacity is present to refine the definition of understanding from simply attaining basic knowledge of growth and development to include also the dimensions of understanding of guidance principles and the ability to respond to very subtle behavioral clues in formulating one's responses to children's behavior. Second, this study also diversifies what earlier studies identified as the quality of environment; that is, it has added actual participation with children and specific small group discussions of observations, designed to explore alternative explanations for the motivations for behavior and possible reactions based on those explanations.

Only one other study could be identified which would
allow a near direct comparison of the results of the present study. Harrison (1970) used the Film Test with high school subjects taking a child development course and working with young children in the school laboratory. She found a significant increase in behavioral understanding over one semester (Total FUB score p. > .05, however, this was with a group of 9 students specifically selected for their interest in and declared occupation preference for working with young children. In short, a theoretically, highly motivated group. In a second group (N = 9) of students she found no significant changes. This group contained some students (numbers not identified) who were recommended for the course by counselors "... in anticipation that some specific needs and problems of these students might be better met due to the nature of the course." The present study provides stronger evidence of the potential of this training for increasing behavioral understanding levels in that the students were much more heterogeneous and therefore somewhat more representative of a cross section of high school students. The greater diversity of students in the present study, even though enrolled in an elective course, lends credence to the notion that when students are encouraged to apply knowledge they are able to internalized the child development concepts and reach a greater degree of comprehension. This is reflected in the dimensions of
the Film Test involving sensitivity and guidance.

Significant changes in marital role expectations were recorded for Group I and Group III. Both groups moved to a position of more egalitarian views of their marriage roles; that is, to a more companionship ideal of marriage, where family members work out their own role definitions based on their needs. It is interesting to speculate why changes of this type would accompany participation in a child development course. It does suggest that these student's views were influenced by specific information on the growth and development patterns of young children and the concomitant responsibilities involved in rearing children. The move to a more egalitarian role preference probably reflects their desire to have their mate share in the responsibilities. Perhaps this change also indicates their increased awareness of the broad scope of the responsibilities of parenthood as well as a desire to provide quality interactional experiences for the children they desire in the future.

If the significant changes recorded in behavioral understanding (Table 2) were influenced by the child development course content, the observations and discussions, and the participation with young children, then they probably also reflect a greater appreciation of the complexities of parenthood and quite possibly a greater commitment
to provide a quality environment for one's own children. Starting with this assumption it is possible to deductively tie together other significant findings in the areas of Marital Role Expectations, Self-concept and perceptions of Ideal Mate.

Subjects professed more egalitarian views of marriage roles over time (Table 3), which essentially expressed their evolving desire to enter a marital relationship in which roles and responsibilities would be worked out on the basis of need rather than conformity to stereotypic views of responsibilities of husbands and wives. This is certainly a consistent shift if one is now more aware that the needs and duties of childrearing are quite unpredictable and strongly a function of action-reaction patterns in a specific situation. The students may be saying that with these new insights into childrearing they now desire a marriage in which this understanding is appreciated and acted upon.

This view would also be consistent with the change trends in self-concept (Table 4) to a slightly more dominant stance but with continued tenderness and consideration. The dominance dimension here, as interpreted by Leary (1957), is best described by terms such as helpful, considerate, yet well thought of, respected for one's knowledge and able to give orders. In other words, their perception of
self at this time may be one of being able to press for acceptance of their convictions without upsetting the love, consideration dimension of their marital relations.

Also consistent is the shift in perception of Ideal Mate (Table 5). At the end of their experience the subjects had, in general, described their ideal mate as somewhat less dominant (except for Group III) which would perhaps be necessary to effect a two-sided egalitarian relationship. The lack of significant changes here suggests, however, that they are still cautious about this view and not yet ready to define such a feeling in strong, absolute terms. The trend toward decreases in the Love dimension here requires a broad conceptualization of that subscale in Leary's terms. As such, the decrease could be explained as describing a preference for a mate who can be frank and honest and can complain if necessary (Figure 2).

At first glance, Group III, with three terms of course work and planned experiences presents at least two perplexing statistical pictures; they fail to conform to an expected linear increase in level of behavioral understanding (Table 2), and they go against the change trend for ideal mate perceptions by recording an increase in the Dominance dimension.

A possible explanation for the consistently smaller change scores for Group III in behavioral understanding
Figure 2. Leary's Classification of Interpersonal Behavior.
could be in the elevated pretest scores on each of the four Film Test scales. This group begins the experience at significantly higher levels of understanding than either of the other two groups, this gives some possibility to a ceiling effect operating in relation to change. Not in the sense of an absolute ceiling due to limitations of the instrument, but perhaps more in relation to their maturity level at this time. How is it that this group would start with such high scores? Out of a group of students being pretested what common characteristics would combine or operate to produce this level of performance? As mentioned earlier, in one sense, scores at this level are actually predictive of enrollment for three terms. Several factors may be contributing. First, to the extent that grade point average reflects intellectual ability, those students may have a decided "test taking" advantage in the form of higher reading skills, word knowledge and understanding and, ability to listen to, understand and follow directions. A second possibility can be inferred from a comparison of the distribution of ordinal position for the three groups.

In Table 16, Appendix B, the frequencies of ordinal positions reported in Tables 12, 13 and 14 have been converted to percentages and condensed to the combinations of 1 and 2 positions in the family and positions through 7.
The disproportionate distribution in Group III is obvious. Prior work regarding the influence of ordinal position on behavioral understanding suggest no strong influence, however, the vast majority of these studies encompassed only one term of study. It is possible that ordinal position influences are masked until the time/experience dimension is expanded as in the present study. This may be a case of serendipity in that the time dimension was used to identify subjects for the various groups and the disproportionate percentages would not have come to light in any other way.

Limitations and Suggestions for Further Study

In terms of exploring a number of questions raised by the results of this study, it is a distinct limitation to have small sample sizes. With additional subjects, particularly in Groups II and III it would be possible to assess the impact of the background factors on the various test scores by setting those factors up as quasi-independent variables and analyzing for significance of differences.

The relatively small number of males in the study precludes any analysis for sex differences. It may be some time before anyone can overcome this particular limitation, however, the value of such information would justify extreme efforts to secure male subjects.

Lack of control group(s) precludes an accurate
assessment of change and may be a particularly important factor in this era of shifting male and female roles, liberation movements and high divorce rates. Such contemporaneous events need to be controlled for as successive studies are undertaken. Another important aspect of this type of research is the need to determine the effects, if any, of both the act of pretesting and the potential pretest-treatment interaction. This can only be accomplished with a more elaborate design incorporating additional control groups.

As a final note, a subjective observation should be included regarding some of the overall reactions of these high school student subjects. A number of concerns were apparent during the testing. For example, in administering the instruments some student anxiety was obvious especially for sophomores. This was apparent even though they were assured that it had no effect on their course grade. Additionally, during the actual taking of the test, in particular the Dunn Marital Role Expectation Inventory and the Interpersonal Checklist, there were terms students did not understand and needed to have clarified and defined. This could be due to the wide range of reading skills and comprehension levels of the students. Some of the terminology seemed out of date for these students (e.g., hard boiled when necessary). Finally, when asked to describe an
ideal mate they exhibited some reluctance and seemed self-conscious to be considering a mate at this point in their lives.
BIBLIOGRAPHY


Hollingshead, August B. 1957. Two factor index of social position. Unpublished research. New Haven, Connecticut, Yale University, Dept. of Sociology. 11 numb. leaves. (Mimeographed)


APPENDICES
APPENDIX A

STUDENT QUESTIONNAIRE

Code Number __________

For most of your life did you live (check one)

_____ in a city of more than 50,000 population

_____ in a town of more than 10,000 but less than 50,000 population

_____ in a town of more than 500 but less than 10,000 population

_____ on a farm

Are your parents living together: (check one)

_____ yes  _____ no

For those who checked "no":

Were your parents separated by (check one)

_____ death  _____ divorce  _____ other

Your father's occupation ________________________________

Your family's main source of income:

wages, hourly wages, piece work  salary, monthly checks _____
weekly checks _____

private relief, odd jobs, share cropping, seasonal work _____

profits and fees from a business or profession _____

savings and investments earned by my father and mother _____

inherited savings and investments _____

Your father completed _____ years of high school

_____ years of college

Your mother completed _____ years of high school

_____ years of college

Your mother's occupation ________________________________

The approximate ages of your brothers: _____ _____ _____ _____ _____

The approximate ages of your sisters: _____ _____ _____ _____ _____

Your age _____  Your birthdate __________

Sex _____  Married _____  Single _____

Approximate grade point average _____
## APPENDIX B

Table 7. Distribution by grade level of subjects completing one, two and three terms of course.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Group One</th>
<th>Group Two</th>
<th>Group Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>18</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 8. Distribution by sex of subjects in groups one, two and three.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Group One</th>
<th>Group Two</th>
<th>Group Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>25</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 9. Distribution by age of subjects in groups one, two and three.

<table>
<thead>
<tr>
<th>Age</th>
<th>Group One</th>
<th>Group Two</th>
<th>Group Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>12</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>6</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No Response</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>
Table 10. Distribution by grade point average for subjects in groups one, two and three.

<table>
<thead>
<tr>
<th>Grade Point Range</th>
<th>Group One</th>
<th>Group Two</th>
<th>Group Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01-1.50</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1.51-2.00</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2.01-2.50</td>
<td>9</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2.51-3.00</td>
<td>6</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.01-3.50</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3.51-4.00</td>
<td>6</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>No Response</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 11. Distribution of subjects by socioeconomic class.

<table>
<thead>
<tr>
<th>Social Class</th>
<th>Group One</th>
<th>Group Two</th>
<th>Group Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>II</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>III</td>
<td>7</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>IV</td>
<td>7</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>V</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>
Table 12. Distribution of ordinal position of subjects in group one.

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Position in Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5  6  7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2  2</td>
</tr>
<tr>
<td>3</td>
<td>1  9  2</td>
</tr>
<tr>
<td>4</td>
<td>2  1  2</td>
</tr>
<tr>
<td>5</td>
<td>2  1  1  1</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Table 13. Distribution of ordinal position of subjects in group two.

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Position in Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5  6  7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1  4</td>
</tr>
<tr>
<td>3</td>
<td>2  2  1</td>
</tr>
<tr>
<td>4</td>
<td>1  1  1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>
Table 14. Distribution of ordinal position of subjects in group three.

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Position in Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Table 15: Comparison of grade point average and Kruskal-Wallis one way analysis of variance H score for groups one, two and three.

<table>
<thead>
<tr>
<th></th>
<th>Group One (N=28)</th>
<th>Group Two (n=16)</th>
<th>Group Three (N=13)</th>
<th>Kruskal-Wallis H Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.P.A.</td>
<td>$\overline{x}$ 2.80</td>
<td>$\overline{x}$ 2.53</td>
<td>$\overline{x}$ 3.11</td>
<td>4.70</td>
</tr>
</tbody>
</table>

$P>.05 = 5.99$
Table 16. Comparison of the distribution of ordinal position for groups by percentage.

<table>
<thead>
<tr>
<th>Group</th>
<th>1st or 2nd</th>
<th>3rd Through 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group One</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>Group Two</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>Group Three</td>
<td>38%</td>
<td>62%</td>
</tr>
</tbody>
</table>
APPENDIX C

EXPLORING CHILDHOOD COURSE OUTLINE

COURSE GOALS:

1. To gain an awareness of human growth and development.
2. To develop an understanding of themselves and others as individuals.
3. To become aware of the responsibilities of and the need for planning for families.
4. To gain an awareness of community resources and services available to families.
5. To understand the value of quality care for young children.

FALL TERM

Orientation to preschool program (scheduling, TB test, getting acquainted)

Getting Involved
- Techniques for working with children

Guidance and Discipline

Children at Home
- Socialization of children within families

Looking at Development
- Family planning, pregnancy, prenatal development and childbirth

No Two Alike
- Children with special physical, mental, social and emotional needs

Note: Underlined titles denote Exploring Childhood materials.
FALL TERM (continued)

Safety (at home, in school and in the community)
  Accident prevention, first aid and emergency resources

Personal Growth
  Value clarification, transactional analysis, individual growth

WINTER TERM

Orientation to preschool program

Getting Involved
  Techniques for working with children; guidance and discipline

Fears, Anger and Aggression
  Recognition of and techniques for handling fear, anger and aggression in themselves and children

Beyond the Front Door--Children at School
  Socialization of children in the community (i.e., TV, literature, play)
  Responsibility of planning for families (family planning)
  Sex role stereotyping; recognizing and eliminating stereotyping

Children's Art
  Exploring the stages of creativity

Child's Eye View
  Looking at the world through a child's eyes

Children's Nutrition
  Meeting children's needs with nutritious meals and snacks

Personal Growth
  Values clarification, communication techniques

SPRING TERM

Orientation to preschool program

Getting Involved
  Techniques for working with children; guidance and discipline
SPRING TERM (continued)

Families Under Stress
Causes and outcomes of personal stress and how to handle it; child abuse; community resources

Families of the World
Becoming aware of other methods of childrearing and adolescent development. Planning for families in other cultures

Children's Play
Recognizing the importance of play in a child's development

The Preschool Years
Recognizing developmental stages of the child from birth to six

Personal Growth
Values clarification; adolescent/parent relationships

Children's Health
Signs of illness, communicable diseases, maintaining children's health, dental health